



NDIA

24 October 2000

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CG, MCWL



Navy / Marine Corps Innovation Tradition



Early Concept



Maj Pete Ellis 1920s

Fleet Experiment



Culebra, Puerto Rico 1923



Wargaming



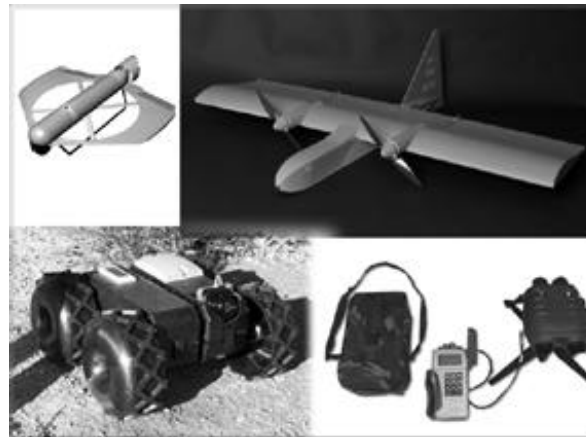
Warfighting
Capabilities



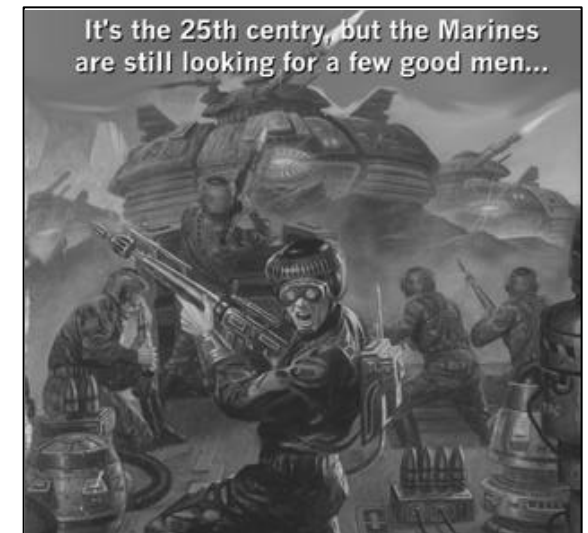
The Three Worlds of Experimentation and Innovation



Solving Immediate
Problems



The Next Service



The Service
After Next



Marine Corps Warfighting Lab



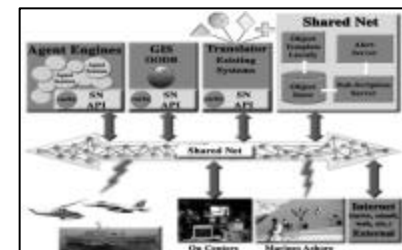
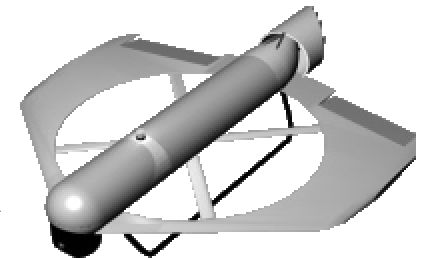
- Purpose
 - To improve naval expeditionary warfare capabilities
- Methodology
 - Concept based
 - Wargaming and field experimentation
 - Team effort with our operating forces
 - Forward results of experimentation to Combat Development System with recommendations for action



Focus Areas



- Military Operations in Urban Terrain (MOUT)
- Studying Asymmetric Threats
- Reconnaissance, Surveillance, Target Acquisition (RSTA) at the tactical level
- Information Technology & Command and Control (IT & C2)
- Wargaming





MCWL Partnerships

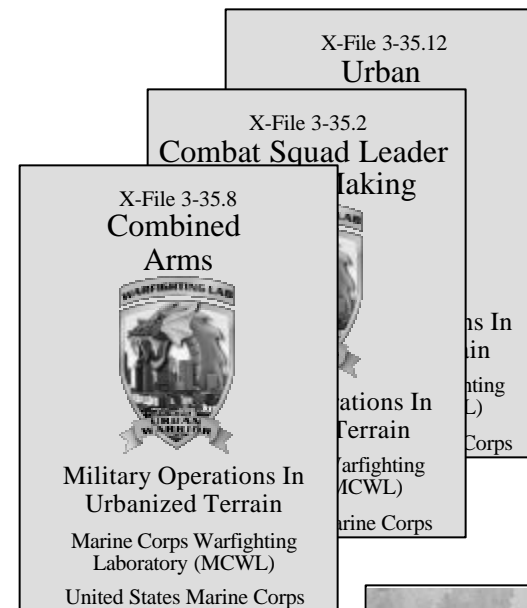




Project Metropolis



- Integrate other projects and ACTDs
 - Urban CAS: being developed by Marine Aviation Weapons and Tactics Squadron 1 (MAWTS)
 - MOUT ACTD: co-manager with Army
 - Project Rifleman: equipping the individual Marine
 - Combat ID ACTD: improving situation awareness and reducing fratricide
 - Urban RSTA: focusing on ground urban recon and sensor employment
- Develop an Urban Combined Arms Exercise (CAX) proposal





MOUT Technologies



- User Requirements identified through Project Metropolis
- Development through MOUT ACTD
 - Stand-off Breaching Weapon
 - Situation Awareness and Combat ID systems
 - Thermobaric individual protection equipment
 - Non-rolling and improved smoke grenades
 - Lightweight helmet



Center for Emerging Threats and Opportunities (CETO)



- To identify emerging non-traditional threats, explore concepts, and determine the capabilities and solutions to meet these future challenges.
- Stands up early FY01
- Initial efforts are focused on our MEUs
 - Civil Affairs/Psyop Training Package
 - Negotiation Skills
 - Interagency Training
 - NGO liaison and contingency support via reach back and deployable support teams.





CETO Continued



In-Port Defense Concept

UUV underwater device for detecting and possibly engaging threats



Lethal UGV which will disable or destroy vehicles trying to run check points

UGV capable of checking for car bombs before they get to a human check point



Remote controlled weapon for perimeter security



Directed Energy Weapon Barrier keeps crowds at bay with non-lethal systems



Project Atlanta

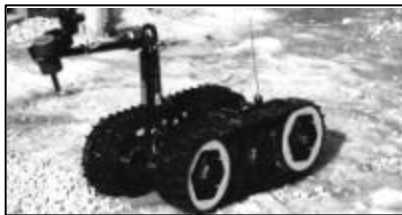
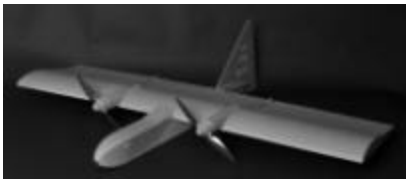
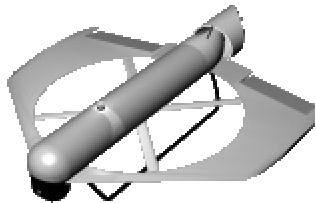


- Partnership between MCWL and Georgia Tech Research Institute
- ChemBio scenario
- Focus
 - Command and Control challenges in WMD situations
 - Developing tactics and technologies for first responders and emergency managers
- Coordinated effort with Chemical Biological Incidence Response Force (CBIRF)





Tactical RSTA



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**Enhanced Situation
Awareness, Targeting,
Decision Making**